REMARKS

Claim Rejections - 35 U.S.C. § 103 Over Farris, Bajwa, and Bassenyemukasa

Claims 1-4, 6, and 13-17 stand rejected for obviousness under 35 U.S.C. § 103(a) as being unpatentable over Farris (U.S. Patent 6,122,357) (hereafter, 'Farris') in view of Bajwa (U.S. Patent Publication 2007/0058787 A1) (hereafter, 'Bajwa'), and further in view of Bassenyemukasa (U.S. Patent No. 5,623,539) (hereafter, 'Bassenyemukasa'). The question of whether Applicants claims are obvious or not is examined in light of: (1) the scope and content of the prior art; (2) the differences between the claimed invention and the prior art; (3) the level of ordinary skill in the art; and (4) any relevant secondary considerations, including commercial success, long felt but unsolved needs, and failure of others. *KSR Int'l Co. v. Teleflex Inc.*, No. 04-1350, slip op. at 2 (U.S. April 30, 2007). Although Applicants recognize that such an inquiry is an expansive and flexible one, the Office Action must nevertheless demonstrate a prima facie case of obviousness to reject Applicants claims for obviousness under 35 U.S.C. § 103(a). *In re Khan*, 441 F.3d 977, 985-86 (Fed. Cir. 2006). To establish a prima facie case of obviousness, the proposed combination of Farris, Bajwa, and Bassenyemukasa must teach or suggest all of Applicants' claim limitations. *Manual of Patent Examining Procedure* § 2142 (citing *In re Royka*, 490 F.2d 981, 985, 180 USPQ 580, 583 (CCPA 1974)). Claim 1 of the present application recites:

1.   A method for specifying telephone services for a particular caller, comprising:

    detecting a call initiation condition from an origin device at a trusted telephone network;

    brokering a connection between said origin device and an external server enabled to perform a caller identity authentication service, wherein brokering a connection further comprises:

transmitting a request for said caller identity authentication service via a signal gateway to a network for accessing said external server;

transferring a prompt for a voice utterance, received from said external server via a media gateway that supports Session Initiation Protocol ('SIP'), to said origin device;

transferring a voice utterance by said caller through said media gateway to said network for accessing said external server; and

receiving said authenticated caller identity via said signal gateway at said trusted telephone network;

responsive to receiving, from said external server, an authenticated caller identity of a caller utilizing said origin device, specifying services available to said caller according to said authenticated caller identity; and

responsive to said authenticated caller identity indicating a lack of identity, automatically initiating recording of said call.

As shown below in more detail, the proposed combination of Farris, Bajwa, and Bassenyemukasa cannot establish a prima facie case of obviousness because the proposed combination of Farris, Bajwa, and Bassenyemukasa does not teach each and every element of the claims of the present application. The rejection of claims 1-4, 6, and 13-17 should therefore be withdrawn and the claims should be allowed. Applicants respectfully traverse each rejection individually and request reconsideration of claims 1-4, 6, and 13-17.

Farris, Bajwa, And Bassenyemukasa Do Not Teach Or Suggest Brokering A Connection Between Said Origin Device And An External Server Enabled To Perform A Caller Identity Authentication Service

The Office Action takes the position that Farris at column 18, line 22 – column 19, line 5, teaches or suggests the following limitation of claim 1: brokering a connection between said origin device and an external server enabled to perform a caller identity authentication service. Appellants respectfully note in response, however, that what Farris at column 18, line 22 – column 19, line 5, in fact discloses is:

> In response to the off-hook and the off-hook trigger set in the subscriber's profile, the SSP type central office switch 11.sub.1 launches a query to the SCP 19 (step S3). Specifically, the SSP 11.sub.1 creates a TCAP query message containing relevant information, such as the office equipment (OE) number assigned to the off-hook line, and transmits that query over an SS7 link to one of the STPs 15. The query includes a destination point code and/or a global title translation addressing the message to the SCP 19, and the STP 15 relays the query message over the appropriate link to the SCP 19. The query from the SSP central office 11.sub.1 identifies the caller's line by its associated office equipment (OE) number and possibly by a single telephone number associated with the off-hook line.

> In response to a query, the SCP 19 accesses its a database, typically, the MSAP database set up in the ISCP, to determine how to process the particular call. The SCP 19 identifies an access key in the query and uses the key to retrieve the appropriate record from the database. In this case, the query indicates an off-hook trigger as the trigger event, therefore the SCP 19 uses the calling party office equipment (OE) number as the access key. The SCP 19 retrieves a call processing record (CPR) corresponding to the office equipment (OE) number associated with the off-hook line and proceeds in accord with that CPR (step S4).

> For the present example of the personal dial tone service, the CPR will provide information necessary for routing the call to some node of the network that will perform speaker identification/verification (SIV). In the preferred embodiment, the SIV is a function performed by an Intelligent Peripheral (IP), therefore the CPR provides information for routing the call to the nearest available IP having the SIV capability.

> Based on the CPR, the SCP 19 formulates a response message instructing the SSP central office 11.sub.1 serving the customer to route the call. In this case, the message includes information, e.g. a office equipment (OE) number or telephone number, used for routing a call to the identified IP 23.

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The SCP 19 formulates a TCAP message in SS7 format, with the destination point code identifying the SSP office 11.sub.1. The SCP 19 transmits the TCAP response message back over the SS7 link to the STP 15, and the STP 15 in turn routes the TCAP message to the SSP central office 11.sub.1 (see step S5)

The SSP type switch in the central office 11.sub.1 uses the routing information to connect the call to one of the lines or channels to the IP 23. A two-way voice grade call connection now extends between the calling station 1.sub.A and the IP 23 (step S6) . In the present example, the switch actually connects the off-hook line to the line to the IP before providing dial tone.

That is, Farris at column 18, line 22 – column 19, line 5, discloses a CPR (call processing record) that provides information necessary for routing a call to some node of the network that will perform speaker identification/verification. Farris's CPR that provides information necessary for routing a call to some node of the network that will perform speaker identification/verification does not disclose brokering a connection between said origin device and an external server enabled to perform a caller identity authentication service as claimed in the present application. Farris does not disclose here, or at any other reference point, 'an external server enabled to perform a caller identity authentication service' as claimed in the present application. In fact, at this reference point, Farris teaches away from Appellants' claimed invention by teaching "routing the call to some node *of the network* that will perform speaker identification/verification." Farris' routing a call to some node of the same network teaches directly away from *an external server* enabled to perform a caller identity authentication service as claimed in the present application. As such, Farris cannot be said to teach or suggest the limitation recited above.

In response to the reasoning provided above in Applicants' response to a previous Office Action, the current Office Action at page 4 argues that Farris discloses the limitation recited above, stating:

Farris is silent on terming the IP providing authentication service as being external server, and the Applicant had relied upon Farris col. 11, ll. 1-4 where Farris notes that "the preferred telephone network also includes one

or more intelligent peripherals (IPs) 23 to provide enhanced announcement and digits collection capabilities and speech recognition" to argue that the IP providing authentication service in Farris is not an external server. The functionalities of announcements and digit collection for automatic call completion to a retrieved telephone number by a directory assistance center are in the third party provided service like directory assistance. The third party directory assistance is included in the telephone network for providing service to its customers but still is external server not owned and operated by the telephone service provider operating the trusted telephone network. Thus, providing a particular service by an intelligent peripheral is not an indicator to show the inclusion or exclusion of the peripheral in a network. The externality of IP as external server is further evident from the Farris disclosure that SCP specifically communicates with IP over separate signaling network 27 (TCP/IP network) (Farris, col. 11, ll. 21-30; col. 19, ll. 16-24) in contrast to SCP communicating with other trusted telephone network components like SSP, STP over trusted network of CCIS using SS7 protocols (Farris, col. 9, ll. 20-55)...

Applicants respectfully note in response, however, that in Applicants' original specification at page 10, Applicants describe the external server stating:

> Further, each telephone network within PSTN 10 may access server systems external to PSTN 10 in the Internet Protocol over the Internet or an Intranet. Such external server systems may include an enterprise server, an Internet service provider (ISP), an access service provider (ASP), a personal computer, and other computing systems that are accessible via a network. In the present embodiment, transfer of information between PSTN 10 and server systems accessible via a network 20 is untrusted and therefore may require verification and additional security. Network 20 may be preferably considered an external network.

That is, the external server is described as being external with respect to a public switching telephone network ('PSTN'). Applicants' illustrate this external relationship in Figure 1 of the present application. In Figure 1, the application servers (22, 24, 26) and the systems management servers (28) are all external servers with respect to the PSTN (10), which is comprised of switches (11), SCP (15), STP (13), and IP (17). In Farris, however, the IP with SIV is not external to a PSTN. Rather, Farris's IP with SIV, central office switches, SCP, and STP operate together to comprise a PSTN. Farris's IP with

SIV, therefore, cannot disclose *an external server* enabled to perform a caller identity authentication service as claimed in the present application.

In addition to the fact that Farris does not teach or suggest the limitation recited above, Applicants further note that Bajawa and Bassenyemukasa also does not teach or suggest brokering a connection between said origin device and an external server enabled to perform a caller identity authentication service as claimed in the present application. Both references disclose a single telephone network without ever once teaching or suggesting that an external server is enabled to perform a caller identity authentication service as claimed here. As such, the proposed combination of Farris, Bajwa, and Bassenyemukasa does not teach or suggest each and every element and limitation of claim 1 of the present application. Because the proposed combination of Farris, Bajwa, and Bassenyemukasa does not teach or suggest each and every element and limitation of claim 1 of the present application, the cited combination of references cannot be used to establish a prima facie case of obviousness against claim 1 of the present application. The rejection of claim 1 under 35 U.S.C. § 103 should therefore be withdrawn and claim 1 should be allowed.

**Farris Does Not Disclose Responsive To Receiving, From
Said External Server, An Authenticated Caller Identity
Of A Caller Utilizing Said Origin Device, Specifying
Services Available To Said Caller According To
Said Authenticated Caller Identity**

The Office Action takes the position that Farris at column 20, lines 6-49, teaches or suggests the following limitation of claim 1: responsive to receiving, from said external server, an authenticated caller identity of a caller utilizing said origin device, specifying services available to said caller according to said authenticated caller identity. Appellants respectfully note in response, however, that what Farris at column 20, lines 6-49, in fact discloses is:

> In step S13, the IP 23 determines if the information extracted from the speech input matches any of the stored template data feature data for an identifiable subscriber (within some threshold level of certainty). If there

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is a match, the IP now knows the identity of the calling subscriber. Based on the identification of the calling subscriber, the IP 23 selects a virtual office equipment (OE) number from storage that corresponds to the subscriber.

The IP 23 formulates a D-channel signaling message containing the virtual office equipment (OE) number together with an instruction to load that OE number into the register assigned to the call in place of the OE number of the off-hook line. The IP 23 supplies the message to the SSP central office switch 11.sub.1 over the D-channel of the ISDN PRI link (step S14). In response, the administrative module processor 61 rewrites the OE number in the register assigned to the call using the OE number received from the IP 23.

Upon rewriting the OE number in the register, the administrative module processor 61 of central office switch 11.sub.1 also reloads the profile information in the register (step S15). Specifically, the administrative module processor 61 retrieves profile information associated with the virtual office equipment (OE) number from the disc storage 63 into the register. As such, the profile information in the assigned register in the call store 67 now corresponds to the identified subscriber, rather than to the off-hook line.

The profile information provides a wide range of data relating to the subscriber's services. The profile data provides necessary billing information, enabling billing from the call to this particular subscriber. The profile also defines various service features available to this subscriber on outgoing calls, such as three-way calling. The profile may define a class of calling service available to the subscriber. In the dormitory example, the caller may be allowed a set dollar amount for long distance calls per month (e.g. $50.00). The profile data will indicate the remaining amount at the time of the call and will cause the switch to interrupt service when the available amount is exhausted. Other class of service restrictions might enable long distance calls only if collect and/or only if calling one or two specified numbers (e.g. only to the parent's house). The class of service might enable only long distance calls within a region or country but not international calls.

That is, Farris at column 20, lines 6-49, discloses an administrative module processor that retrieves profile information associated with a virtual office equipment number. Farris's administrative module processor that retrieves profile information associated with a virtual office equipment number does not teach or suggest responsive to receiving, from said external server, an authenticated caller identity of a caller utilizing said origin

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device, specifying services available to said caller according to said authenticated caller identity as claimed in the present application. As explained above, Farris does not disclose an *external server* as claimed in the present application. Rather, Farris teaches at column 18, lines 57-55, an intelligent peripheral as a "node of the network that will perform speaker identification/verification," that is, a node of the *same* network. Because Farris does not disclose an external server as claimed here, Farris cannot be said to teach or suggest responsive to receiving, from said external server, an authenticated caller identity of a caller utilizing said origin device, specifying services available to said caller according to said authenticated caller identity as claimed in the present application.

In addition to the fact that Farris does not teach or suggest the limitation recited above, Applicants further note that Bajawa and Bassenyemukasa also does not teach or suggest responsive to receiving, from said external server, an authenticated caller identity of a caller utilizing said origin device, specifying services available to said caller according to said authenticated caller identity as claimed in the present application. Both references disclose a single telephone network without ever once teaching or suggesting that an receiving an authenticated caller identity of a caller utilizing said origin device from an external server as claimed here. As such, the proposed combination of Farris, Bajwa, and Bassenyemukasa does not teach or suggest each and every element and limitation of claim 1 of the present application. Because the proposed combination of Farris, Bajwa, and Bassenyemukasa does not teach or suggest each and every element and limitation of claim 1 of the present application, the cited combination of references cannot be used to establish a prima facie case of obviousness against claim 1 of the present application. The rejection of claim 1 under 35 U.S.C. § 103 should therefore be withdrawn and claim 1 should be allowed.

**Bajwa Does Not Teach Or Suggest Transferring A Prompt
For A Voice Utterance, Received From Said External
Server Via A Media Gateway That Supports Session
Initiation Protocol ('SIP'), To Said Origin Device**

The Office Action takes the position at page 5 that Bajwa at paragraphs 0019 and 0021
teaches or suggests the following limitation of claim 1: transferring a prompt for a voice
utterance, received from said external server via a media gateway that supports Session
Initiation Protocol ('SIP'), to said origin device. Applicants respectfully note in
response, however, that what Bajwa at paragraph 0019 actually discloses is:

> [0019] Feature server 215 may include such capability as voice prompting
> that prompts the user to enter needed additional information to complete
> the authentication process, such as a calling card number. The caller may
> also be prompted for the destination number if that has not already been
> entered, as shown at 309. That prompt is routed through the packet-based
> network to gateway 203, which converts the prompt to an appropriate
> protocol for the PSTN network. There may be multiple prompts and
> responses depending on the exact nature of the service provided. For
> example, the caller may be prompted for a calling card number, a
> destination number, a credit card, a personal identification number or
> some other credential required to complete the call. The PSTN provides
> the responses as DTMF (Dual Tones Multi-Frequency) tones used by
> touch-tone telephones which are captured by the gateway. The captured
> DTMF tones are used to validate or reject the call. If validated, DTMF
> capture is used for the destination number or other information provided
> by the caller.

And what Bajwa at paragraph 0021 actually discloses is:

> [0021] The transfer facility to redirect the call to the other egress point
> (e.g., gateway 205) from feature platform 215 may utilize a transfer
> mechanism provided by a number of different underlying protocols. In one
> environment, the transfer facility provided under H.450.2 may be utilized,
> which is a supplemental standard for H.323. In a load sharing
> environment, the transfer facility provided in H.450.3 may be utilized.
> Transfer capabilities provided by various emerging protocols, such as
> Simple Gateway Control Protocol (SGCP), Media Gateway Control
> Protocol (MGCP), Megaco, Session Initiation Protocol (SIP), which is a
> signaling protocol for Internet conferencing and telephony, or Internet
> Protocol Device Control (IPDC) protocol, may be used to redirect the call.
> The particular transfer facility used is not important as long as the

functionality of redirecting the call according to the teachings herein is accomplished.

That is, Bajwa at paragraph 0019 discloses a feature server that can create a voice prompt that prompts a user to enter needed additional information to complete an authentication process. Furthermore, Bajwa at paragraph 0021 discloses a transfer facility that redirects a call to the egress point from feature platform by utilizing a transfer mechanism provided by an underlying protocol such as Session Initiation Protocol (SIP). The cited reference point, however, does not teach or suggest transferring a prompt for a voice utterance, received from said external server via a media gateway that supports Session Initiation Protocol ('SIP'), to said origin device as claimed in the present application because Bajwa does not teach or suggest a prompt for a voice utterance as claimed in the present application. The present application explicitly recites that a prompt for a voice utterance, that is, a prompt to a user for the user to make a verbal utterance. In contrast to the claims of the present application, nothing disclosed in Bajwa prompts a user to make some sort of verbal utterance. Bajwa merely teaches that a verbal prompt may be given to a user to provide some information. Bajwa further discloses that a user can provide such information through the use of DTMF (Dual Tones Multi-Frequency) tones used by touch-tone telephones which are captured by the gateway. That is, in Bajwa the prompt *itself* is verbal – the prompt is not, however, *a prompt for a voice utterance*. Bajwa's user is not prompted to make a voice utterance. Instead, Bajwa's user is prompted to use a touch tone keypad to enter information.

In addition to the fact that Bajwa does not teach or suggest the limitation recited above, Applicants further note that Bajawa and Bassenyemukasa also does not teach or suggest transferring a prompt for a voice utterance, received from said external server via a media gateway that supports Session Initiation Protocol ('SIP'), to said origin device as claimed in the present application. Both references disclose a single telephone network without ever once teaching or suggesting that a prompt for a voice utterance is received from an external server via a media gateway that supports Session Initiation Protocol ('SIP') as claimed here. As such, the proposed combination of Farris, Bajwa, and Bassenyemukasa does not teach or suggest each and every element and limitation of claim 1 of the present

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application. Because the proposed combination of Farris, Bajwa, and Bassenyemukasa does not teach or suggest each and every element and limitation of claim 1 of the present application, the cited combination of references cannot be used to establish a prima facie case of obviousness against claim 1 of the present application. The rejection of claim 1 under 35 U.S.C. § 103 should therefore be withdrawn and claim 1 should be allowed.

The Office Action Does Not Examine Applicants' Claims Pursuant To *Graham*

In addition to the fact that the Office Action has not established a prima facie of obviousness there is another reason that the rejection of claim 1 should be withdrawn: The Office Action does not examine Applicants' claims in light of the factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). As mentioned above, the question of whether Applicants' claims are obvious or not is to be examined in light of the pertinent *Graham* factors: (1) the scope and content of the prior art, (2) the differences between the claimed invention and the prior art, and (3) the level of ordinary skill in the art *KSR Int'l Co. v. Teleflex Inc.*, No. 04-1350, slip op. at 2 (U.S. April 30, 2007); *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). "To facilitate review, this analysis should be made explicit." *KSR*, slip op. at 14 (citing *In re Kahn*, 441 F. 3d 977, 988 (Fed. Cir. 2006)). That is, the Office Action must make explicit an analysis of the factual inquiries required by *Graham*.

In particular in this case, the Examiner has not ascertained the differences between the prior art and the claims in issue. In the Office Action, the Examiner has only identified elements in Applicants' claims not found in one reference and then attempted to find a similar element in another to support an obviousness rejection. Such analysis is improper and incomplete. "Ascertaining the differences between the prior art and the claims at issue requires interpreting the claim language, and considering both the invention and the prior art references as a whole." MPEP §2141.02. Furthermore, "[i]n determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious." *Id.*, citing *Stratoflex, Inc. v. Aeroquip*

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Corp., 713 F.2d 1530 (Fed. Cir. 1983). The Office Action in the present case is a deficient basis for obviousness rejections because the Examiner has only identified differences between certain elements of Applicants' claims and the references. This analysis is improper and incomplete because the Examiner has not determined whether the Applicants' claims as a whole would have been obvious in view of the combinations of references cited and why the claims as a whole would have been obvious over the references.

In addition, the Examiner has not resolved the level of ordinary skill in the pertinent art. "The importance of resolving the level of ordinary skill in the art lies in the necessity of maintaining objectivity in the obviousness inquiry." MPEP §2141.03 citing *Ryko Mfg. Co. v. Nu-Star, Inc.,* 950 F.2d 714, 718, 21 USPQ2d 1053, 1057 (Fed. Cir. 1991). "The examiner must ascertain what would have been obvious to one of ordinary skill in the art at the time the invention was made, and not to the inventor, a judge, a layman, those skilled in remote arts, or to geniuses in the art at hand." *Id.* citing *Environmental Designs, Ltd. v. Union Oil Co.,* 713 F.2d 693, 218 USPQ 865 (Fed. Cir. 1983), cert. denied, 464 U.S. 1043 (1984). "Factors that may be considered in determining level of ordinary skill in the art include (1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the technology; and (6) educational level of active workers in the field." *Id.* citing *Environmental Designs, Ltd. v. Union Oil Co.,* 713 F.2d 693, 696, 218 USPQ 865, 868 (Fed. Cir. 1983), cert. denied, 464 U.S. 1043 (1984). The Office Action in the present case fails to apply a single factor used to determine the level of ordinary skill in the art. As a practical matter, the Examiner in this case has made no substantive mention whatsoever of the factual inquiries required by *Graham.* As such, the rejections of claim 1 under 35 U.S.C. § 103 is improper and should be withdrawn.

Relations Among Claims

Claim 13 of the present application recites a method for informing a callee of a caller identity that is similar to the method of claim 1. For the same reasons that claim 1 is

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patentable in view of the cited combination of references, claim 13 is also patentable. The rejection of claim 13 should therefore be withdrawn and claim 13 should be allowed.

Claims 2-4, 6, and 14-17 depend from independent claims 1 and 13. Each dependent claim includes all of the limitations of the independent claim from which it depends. Because the combination of Farris, Bajwa, and Bassenyemukasa does not teach or suggest each and every element of independent claims 1 and 13, so also the combination of Farris, Bajwa, and Bassenyemukasa cannot possibly teach or suggest each and every element of any dependent claim. The rejections of claims 2-4, 6, and 14-17 should therefore be withdrawn and these claims also should be allowed.
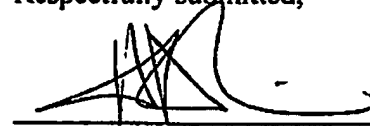
Conclusion

Claims 1-4, 6, and 13-17 stand rejected for obviousness under 35 U.S.C. § 103 as being unpatentable over the combination of Farris, Bajwa, and Bassenyemukasa. For the reasons set forth above, however, the proposed combination of Farris, Bajwa, and Bassenyemukasa cannot be used to establish a prima facie case of obviousness against claims 1-4, 6, and 13-17 of the present application. The rejection of claims 1-4, 6, and 13-17 under 35 U.S.C. § 103 should therefore be withdrawn and the claim should be allowed. Applicants respectfully request reconsideration of claims 1-4, 6, and 13-17.

The Commissioner is hereby authorized to charge or credit Deposit Account No. 09-0447 for any fees required or overpaid.

Respectfully submitted,

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